

Amendments to the Claims

1. (currently amended) A method of transmitting communications codes, comprising:
 - transmitting a first pseudo-noise code; and
 - transmitting a second pseudo-noise code, wherein the second pseudo-noise code is a time-reversed version of the first pseudo-noise code and a relationship between the first and second codes in each transmission allows transmission of two bits of data for each one transmission.
2. (original) The method of claim 1, transmitting a second pseudo-noise code further comprising transmitting a second pseudo-noise code that is bit-wise inverted from the first pseudo-noise code.
3. (original) The method of claim 1, transmitting a first pseudo-noise code further comprises transmitting a first pseudo-noise code as a bit-wise inverted version of an original code.
4. (original) The method of claim 1, the method comprising using the first and second pseudo-noise codes to establish a communications link with a receiver of the first and second codes.
5. (original) The method of claim 1, transmitting a first pseudo-noise code further comprising transmitting a pseudo-noise code wherein selection of the code depends upon a type of transmitting device.
6. (original) The method of claim 1, transmitting a first pseudo-noise code further comprising transmitting a pseudo-noise code wherein selection of the code depends upon a transmitting device.

7. (original) The method of claim 1, transmitting a first pseudo-noise code further comprising transmitting a pseudo-noise code wherein selection of the code depends upon an event.
8. (currently amended) A method of receiving communications codes, comprising:
receiving a transmission including first and second pseudo-noise codes formed into a pair;
comparing the first pseudo-noise code to the second pseudo-noise code; and
detecting a match between the first and second pseudo-noise codes based upon a match count peak; and
sending an enable signal to a memory to cause the memory to store at least one of the first and second codes, the enable signal based upon a match detection result.
9. (original) The method of claim 8, the method comprising filtering outputs resulting from the detecting to identify sharp peaks.
10. (currently amended) The method of claim 8, ~~the method comprising~~ storing at least one of the first or second code ~~further comprising~~ storing the code for later analysis as a received code.
11. (original) The method of claim 10, the method comprising comparing the received code further comprising comparing the received code against at least one reference value.
12. (original) The method of claim 11, the method comprising using at least a part of the received code as an index into a lookup table.
13. (canceled) The method of claim 10, storing the code further comprising sending an enable signal to a memory to store a current pseudo-noise code based upon match detection.
14. (currently amended) A device, comprising:

- a receiver to receive a pair of pseudo-noise codes;
- a first register to store a first pseudo-noise code;
- a second register to store a second pseudo-noise code in time-reversed order;
- a comparison circuit to compare contents of the first register to contents of the second register and output a match count result; and
- a memory electrically coupled to the comparison circuit to receive an enable signal from the comparison circuit, the enable signal being based upon a match count result.
15. (original) The device of claim 14, the first register further comprising a shift register.
16. (original) The device of claim 14, the second register further comprising a shift register to shift data in a direction opposite a direction of the first register.
17. (original) The device of claim 14, the device comprising a filter to filter the result and identify sharp peaks.
18. (original) The device of claim 14, the comparison circuit comprising an exclusive OR gate array.
19. (currently amended) The device of claim 14, the device comprising a the memory to store one of the first pseudo-noise code or the second pseudo-noise code as a received code.
20. (canceled)